

OIL AND GAS LEASE
(No Surface Use)

THIS AGREEMENT entered into as of the 20th day of February , 2009 between LUMINANT MINERAL DEVELOPMENT COMPANY, L.L.C. (hereinafter referred to as "Lessor") and THUNDERBIRD OIL & GAS, L.L.C. (hereinafter called "Lessee") whose address is 515 Fourth Street, Graham TX 76450

W I T N E S S E T H :

1. **Grant.** For and in consideration of the sum of One-hundred and 00/100 (\$100.00) Dollars, other good and valuable consideration, and the other agreements of Lessee herein, and subject to the terms and conditions hereinafter set forth, Lessor hereby grants, leases and lets exclusively unto Lessee, for the purpose of exploring, drilling for, and producing oil and gas, all, however, subject to the provisions of this lease, that certain property situated in the County of **Tarrant**, State of Texas, and described on Exhibit "A" attached hereto and incorporated hereby by reference (herein referred to as "said lands" or the "leased premises"). For the purposes of all payments required herein, the lands included within the terms of this Lease shall be deemed to comprise **5.719 acres**, whether they actually comprise more or less.

The leased premises shall also include Lessor's rights and interests in all streets, roads, alleys, rights-of-way and easements that abut or are adjacent to the leased premises (the "Strips"). Prior to commencing operations on the leased premises, Lessee shall determine the amount of acreage included within the Strips. Lessee shall pay to Lessor an additional bonus payment equal to Lessor's net mineral acreage in the Strips times \$11,500.00 per net mineral acre.

The following terms shall have the meanings set forth below when used in this lease:

(a) **"oil and gas"** - oil, natural gas, and casinghead gas, and such other hydrocarbon substances and sulphur as are necessarily produced with, and incidental to, the production of oil and natural gas.

(b) **"commencement of drilling"** of a well - the drilling of a well shall be deemed to have commenced when a rig and machinery capable of drilling to a depth sufficient to test a prospective oil or gas horizon for such well have been erected on the well location.

(c) **"completion date"** of a well - the completion date of non-producing wells shall be the date of final plugging and abandonment, and the completion date of producing wells shall be the date the well is physically completed and capable of production, including the completion of the potential test and all other tests required by the regulatory agency having jurisdiction.

2. **Reserved Rights.** Lessor expressly reserves the full enjoyment and use of the leased premises and all rights with respect to the surface and subsurface thereof for any and all purposes except those granted, and to the extent granted, to Lessee hereby.

3. **Primary Term.** Subject to the other terms and provisions hereof, this lease shall remain in force for a period of three (3) years from the date hereof (the "primary term"), and for as long thereafter as (a) oil or gas is produced in paying quantities from the leased premises, or (b) this lease is maintained in force in any other manner hereinafter provided. As used in this lease the term, "produced in paying quantities," means that the receipts from the sale or other authorized commercial use of Lessee's share of the oil and gas produced from the leased premises exceed Lessee's out of pocket expenses of operation on the leased premises for the nine (9) months last past, subject to the provisions of Paragraphs 9 and 12 hereof.

4. **Optional Extension of Primary Term.** Lessee is hereby given the option, to be exercised on or before the expiration of the primary term of this lease, of extending this lease for an additional term of two (2) years, as to all or any portion of the acreage then held hereunder which would expire unless so extended. The only action required by Lessee to exercise this option is the payment to Lessor of the additional sum equal to \$11,500.00 per acre multiplied by

the net mineral acreage so extended. If this lease is extended as to only a portion of the acreage covered hereby, Lessee shall designate such portion by a recordable instrument. The right of Lessee to extend this lease as provided herein is at the option, but not the obligation, of Lessee.

5. Pooling. Lessee may, at its election, and subject to the provisions of this lease, pool and unitize the leased premises or any portion thereof, with other land(s) or lease(s) adjoining the leased premises in order to form a unit or units not to exceed (i) 40 acres for each vertically drilled oil well, (ii) 40 acres for each vertically completed gas well producing from the Barnett Shale formation and 80 acres for each other gas well, and (iii) 640 acres for each completed gas well drilled as a horizontal drainhole well as defined by the Railroad Commission of the State of Texas. No pooling or unitization shall be effective unless Lessee executes and places of record in the county in which the leased premises are located a written instrument or instruments designating the unit or units it has elected to form, but in no event shall the pooling be effective after the date of first sales of oil or gas produced from such pooled unit. The entire acreage so pooled shall be treated as if it were included in this Lease, and in lieu of the royalty specified in this lease, Lessor shall receive from the production of a unit so formed only such portion of royalties as the amount of Lessor's acreage placed in the unit bears to the total acreage in the particular unit involved. Production or operations on any part of the pooled unit or units shall be treated as production or operations on the part of leased premises placed therein, whether or not the well or wells are located on the leased premises.

Anything in this lease to the contrary notwithstanding, operations on, or production from, any unit or units (which are permitted to be formed or created hereunder) embracing both leased premises and other land, shall maintain the lease in force after the expiration of the primary term only as to that portion of the leased premises included in such unit or units. The lease may be maintained in force as to the acreage lying outside of such unit or units in any manner specified in the lease. At the expiration of the primary term, unit operations or production shall maintain the lease only within the geographical boundaries of such unit or units and only as to all formations from the surface of the ground down to the stratigraphic equivalent of 100 feet below the base of the deepest formation drilled by Lessee in said unit well, and the lease, as to all areas outside of the geographical boundaries of and as to all lower formations within such unit or units shall ipso facto cease, terminate and be forfeited without notice, demand or putting in default, provided, however, that if the said unit well is drilling at the expiration of the primary term, such drilling operations shall continue the lease within the geographical boundaries of the said unit or units in full force and effect as to all depths until such drilling and logging operations are concluded, at which time the lease shall ipso facto cease, terminate and be forfeited without notice, demand or putting in default as to all formations below the stratigraphic equivalent of the base of the deepest formation drilled and logged in said unit well.

At the end of the primary term of this lease, this lease will be treated as a separate instrument with respect to each pooled unit containing any portion of the leased premises, such that this lease shall continue in effect as to the retained interval in each separate tract of the leased premises included in a pooled unit as long as a well located within such unit shall continue to produce in paying quantities (or deemed producing in paying quantities according to Paragraph 9 hereof) or Lessee shall continue to conduct additional drilling or reworking operations within such unit with not more than sixty (60) days elapsing between the cessation of production and the commencement of additional operations for the actual drilling or reworking of the same or another well on such tract of retained acreage that results in production in paying quantities.

6. Royalty. Lessee shall pay to Lessor, as royalty, one-fourth (1/4) of the market value of all oil and gas and other substances covered hereby produced and saved from, or attributed to, the leased premises, delivered into the pipeline or to the place where first sold by Lessee, subject to the following provisions:

(a) Royalty shall be due for all oil and gas produced hereunder, including oil and/or gas used for fuel during drilling, completion and reworking operations on the leased premises and for treating and separating oil or gas produced hereunder.

(b) In the event gas, including gas from oil wells, is processed in any facility or plant in which Lessee, or any subsidiary, parent or affiliate of Lessee, has, directly or indirectly, an ownership or operating interest, then the value of such gas shall not be less than the

combined values at the plant of all products extracted therefrom including, but not limited to, condensate, distillate, natural gasoline, methane, ethane, propane, butane, pentane (collectively, "products") and the residue gas, free of all costs and losses associated with gathering, processing and compression.

(c) In the event gas, including gas from oil wells, is processed in any facility or plant in which neither Lessee, nor any subsidiary, parent or affiliate of Lessee, has an operating or ownership interest, under an arrangement by which Lessee receives or retains a share of products extracted, residue gas, or other things of value, then in such event, the value of such gas shall be equal to the combined values at the tailgate of the plant of all things of value received or retained by Lessee under such arrangement.

(d) Lessor shall bear the severance or production taxes levied against its royalty share of all production hereunder, and payment of royalties shall be made after deduction of such taxes paid by Lessee thereon. It is agreed between the Lessor and Lessee that, notwithstanding any language herein to the contrary, all oil, gas or other proceeds accruing to the Lessor under this lease or by state law shall be without deduction, directly or indirectly, for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting, and marketing the oil, gas and other products produced hereunder to transform the product into marketable form; however, any such costs which result in enhancing the value of the marketable oil, gas or other products to receive a better price may be deducted from Lessor's share of production so long as they are based on Lessee's actual cost of such enhancements. But in no event shall the price received by Lessor be any more than or any less than the price received by Lessee. It is the intent of the parties that the foregoing provisions of this Paragraph 6(d) are to be fully effective and enforceable and are not to be construed as "surplusage" under the principles set forth in *Heritage Resources v. NationsBank*, 939 S.W.2d 118 (Tex. 1997). Lessor's royalty share will be paid on any consideration paid to Lessee under any gas sales contract including, but not limited to, take-or-pay payments and payments received in connection with any gas contract termination or modification.

(e) On or before the 25th day of the second month following the month that Lessee receives payment from the first purchaser of oil, gas or products produced from the leased premises, Lessee shall mail or deliver to Lessor an itemized statement showing the total production of each substance, including products extracted from gas, during such preceding month, the royalties including, without limitation, volumes, prices, severance taxes, and other deductions applicable to each such substance, including plant products, as well as a full and complete explanation of the method of computation of such royalties on each substance, including all corrections, additions or deductions; and, at the same time, Lessee shall remit, or cause to be remitted, to Lessor the royalties due hereunder on production sold during such month covered by such statement. Any royalties or other payments provided for in this lease that are suspended without cause or not paid to Lessor within the time period specified therefor shall accrue interest at the highest rate that may be legally contracted for by parties in the position of Lessor and Lessee from the due date until paid, provided that the preceding obligation to pay interest shall not apply if the payment is suspended or is not paid by the first purchaser of production of oil, gas or products produced from the leased premises, or is suspended or not paid by Lessee because of a good faith dispute of the amount of any royalty to be paid to Lessor. Acceptance by Lessor of royalties that are past due shall not act as a waiver or estoppel of its right to receive or recover any and all interest due thereon under the provisions hereof unless the written acceptance or acknowledgement by Lessor to Lessee expressly so provides. Any tender or payment to Lessor of a sum less than the total amount due to Lessor hereunder which is made or intended to be made as an offer of settlement or accord and satisfaction by or on behalf of Lessee must be accompanied by a Notice of Settlement Offer, so denominated, addressed to Lessor. Any such offer of settlement submitted solely by the tender of a check containing language of settlement or accord and satisfaction printed or otherwise inserted thereon shall not be deemed an offer of settlement or accord and satisfaction, unless preceded by a Notice of Settlement Offer. Should Lessee fail to pay such royalty within such time, then Lessee shall pay to Lessor interest on said accrued royalties at the prime rate of interest established from time to time by JPMorgan Chase Bank, N.A. or its successor, from the due date until the date of payment. :

If Lessee fails to pay royalty due to Lessor for three (3) or more consecutive months and the aggregate past due royalty owed to Lessor exceeds \$25,000, then Lessor shall, at

its option, have the right to cancel this lease by filing an affidavit of record in Tarrant County, Texas; however, prior to filing such affidavit, Lessor shall give written notice to Lessee (Attention Land Department) conspicuously marked "NOTICE OF LEASE CANCELLATION" via certified mail of such intention, and Lessee shall then have sixty (60) days in which to comply with the provisions of this paragraph. Should Lessee pay Lessor all royalty payments past due during said period with accrued interest, this lease shall not be cancelled. The rights of Lessor under this paragraph shall be in addition to, and not in lieu of, all rights Lessor may have as to payment of royalty under V.T.C.A. Natural Resources Code §§ 91.401 through 91.405. Lessee shall pay all attorney fees incurred by Lessor in connection with any lawsuit in which Lessor is successful in recovering any royalties or interest or in terminating this lease due to Lessee's failure to pay royalties within the period set forth herein.

(f) In the event Lessor should own less than the entirety of the oil and gas under any portion of the leased premises, then the royalties due Lessor on production from said portion of the leased premises shall be reduced to the proportion thereof that Lessor's interest in such oil and gas in said portion bears to the entirety of the oil and gas thereunder. In this regard, this lease is granted to cover Lessor's interest in the oil and gas in said lands and the interests in the oil and gas in said lands owned by others, if any, as to which Lessor has the right and authority to grant a lease to the extent such interests in the oil and gas in said lands owned by others are not presently subject to any other valid and subsisting oil and gas lease. To the extent this lease covers such interests in the oil and gas in said lands owned by others than Lessor, Lessee will timely pay to such other owners their respective proportionate shares of all benefits accruing hereunder to which such other owners are lawfully entitled.

(g) The market value of Lessor's royalty gas shall never be less than the price received by Lessee for Lessee's gas at the Point(s) of Sale. The market value of gas shall never be less than the net proceeds received by Lessee for the sale of such gas.

(h) Lessor shall have a continuing right and option, but not the obligation, to be exercised by Lessor as set forth herein, to take its royalty interest share of production in kind at the Lessee's initial point of delivery into a third party gathering or transportation system; provided, Lessor must give Lessee thirty (30) days advance written notice of Lessor's intent to take its royalty interest share of production in kind, and Lessor's election shall be for monthly periods of at least three (3) consecutive months. The following provisions shall also apply with respect to Lessor's taking its royalty interest share of production in kind:

(i) Lessor shall have equal access to the delivery points for third party purchasers and shippers of Lessee's gas insofar as Lessee has control of the access to such delivery points into which Lessor may then produce;

(ii) Lessee shall deliver all of Lessor's royalty interest share of gas production through its or its affiliate's pipeline or gathering system free of all post-production expenses to the Point of Sale; and

(iii) Any imbalances as between Lessor and Lessee will be handled in accordance with the provisions of a mutually agreeable gas balancing agreement.

(i) Lessor shall, at Lessee's office, have the right to audit, exercisable not more than once during any 12-month period, the accounts and records of Lessee, its successors and assigns, relating to the leased premises and to its operations under this lease. Such right shall be exercised by Lessor by giving Lessee not less than ten (10) business days prior notice and such audit shall be conducted only during normal business hours. If the audit reveals an underpayment of more than \$5,000, Lessee shall be responsible, and promptly reimburse Lessor in respect of all expenditures by Lessor, for the costs of the audit.

(j) If gas, oil, or byproducts are sold to an affiliate of Lessee, Lessor's royalty shall be the greater of (i) the proceeds realized from such sale, or (ii) the value of the gas as determined by the quoted index price per MMBTU, as reported in the first issue for the month of production of the Inside F.E.R.C. Gas Marketing Report, its successors and assigns, or equivalent publication, for Natural Gas Pipeline Co. of America, Mid-continent Zone, with an appropriate deduction, as reasonably determined by Lessee, for the cost of transmission of the gas to the field, such deductions to not exceed \$0.25 per Mcf. The term "affiliate of Lessee", as

used herein, means and includes any individual, firm, corporation, partnership, limited liability company, association, joint stock company, pension fund, trust or trustee thereof, estate or executor thereof, unincorporated organization or joint venture, or any other legally recognizable entity that (a) directly or indirectly owns, controls or holds with power to vote 10% or more of the outstanding voting securities of Lessee, (b) 10% or more of whose outstanding voting securities are directly or indirectly owned, controlled or held with power to vote by Lessee, or (c) directly or indirectly controls, is controlled by or is under common control with Lessee.

(k) If gas is produced from the leased premises, and if more than one party owns the working interest share of the gas produced, and if any or all of such co-owners elect to take and market their share of such gas separately, resulting in "split-stream" deliveries of such gas to different purchasers, then the following shall apply:

(i) Lessor shall be entitled to Lessor's royalty share (proportionately reduced, as herein provided, if Lessor owns less than all the oil and gas under the leased premises) of the proceeds of the sale of the entire production of gas produced from the leased premises, regardless of how such gas is allocated among the working interest owners or to whom such gas is sold, and regardless of any agreements to the contrary among the working interest owners.

(ii) Lessee, its successors and assigns shall be liable for Lessor's entire royalty on such gas production, regardless of whether Lessee actually is allocated or receives any proceeds of sale of any such production. Lessee shall account to Lessor for all of Lessor's royalty share of such gas production so that Lessor shall not be required to receive royalties from more than one purchaser or working interest owner, and Lessee shall provide production statements from all purchasers of such gas showing the volumes sold and the price paid therefor, and any applicable adjustments.

(l) To secure Lessee's payment of royalties and overriding royalties and compliance with the other terms and provisions of this lease, Lessor hereby retains, and Lessee hereby grants to Lessor, a security interest in twenty-five percent (25%) of all (as extracted collateral): (A) oil and gas produced, saved and extracted from the leased premises, under and pursuant to this lease, and (B) all accounts arising out of the sale of such oil and gas and all proceeds thereof (the "Collateral"). The security interest created hereby shall continue with respect to oil and gas produced, saved and extracted from the leased premises notwithstanding the sale or other disposition thereof until Lessor, as secured party, receives indefeasible payment of the royalties due with respect thereto under the terms and provisions of this lease. In addition to any other remedies provided in this lease, Lessor, as a secured party, may in the event of Lessee's default hereunder, including any failure to pay when due royalties in the amount required hereby, (i) proceed under the Texas Uniform Commercial Code (the "Texas UCC") as to the Collateral, in any manner permitted by the Texas UCC and (ii) shall have available to it the remedy of sequestration available to secured parties, and to the extent permitted by law, the remedies of replevin, attachment and garnishment to assist Lessor in realizing upon its rights. This lease, or a memorandum thereof, shall, upon its recordation, be effective as a financing statement under the Texas UCC, and shall serve as an authenticated record under Texas Business and Commerce Code Section 9.203. The addresses of Lessor, as Secured Party, and Lessee, as Debtor, and information concerning Lessee's organizational type, and state of organization are as set forth in this lease. To assure continued perfection of the security interest created hereby, (i) Lessee agrees to promptly notify Lessor of any change in its name or jurisdiction of organization, and (ii) Lessee authorizes Lessor to file in any appropriate office a financing statement identifying Lessee as debtor and covering the Collateral and continuation statements with respect to this lease or any separate financing statement.

(m) The receipt by Lessee from a purchaser or pipeline company of proceeds of production for distribution to Lessor will not result in Lessee, or Lessee's operator, acquiring legal or equitable title to those proceeds, but Lessee, or Lessee's operator, will at all times hold the proceeds for the benefit of Lessor.

7. Offset Wells. If the nearest bottom-hole producing perforations in a well capable of producing oil or gas or other hydrocarbons in paying quantities should hereafter be completed within 330 feet of the leased premises, or within such greater distances as may be established by

a Regulatory Body as a part of a drilling or spacing pattern for the field, then, within sixty (60) days after such well shall have been completed (but subject to Paragraph 12 hereof), and if a reasonably prudent operator would drill, Lessee shall either commence operations for and thereafter diligently prosecute the drilling of an offset well at a permitted location which is reasonably designed to protect the leased premises from drainage or release and surrender all of Lessee's rights hereunder with respect to that portion of the leased premises not in a unit.

8. Reasonable Development. Lessee shall, in addition to all other obligations provided in this lease, reasonably develop the leased premises with due regard to the interests, rights and obligations of Lessor and Lessee. Except for the surface use limitations contained in Paragraph 17 hereof, none of the provisions of this lease are intended, nor shall any of such provisions ever be construed, to limit the extent of whatever operations or other action would otherwise be required of Lessee hereunder in order to properly explore and develop the leased premises, to produce and market production therefrom, and to protect same from drainage. All of Lessee's express obligations hereunder shall be construed as providing minimum standards only and shall not be construed as relieving Lessee of any statutory duties or implied covenants and duties.

9. Shut-In Royalty. If Lessee should actually complete and test a well which is capable of producing only gas, or only gas and condensate, in paying quantities, but which is not producing because of the lack of a regularly available market for the gas to be produced therefrom, such shut-in well shall nevertheless be deemed to be a well producing gas in paying quantities if Lessee shall, within ninety (90) days after such well is completed, pay to Lessor, as shut-in royalty the amount of \$50.00 per acre for each shut-in well. Such payment shall maintain the lease in effect for one year from the date such payment is made as to the proration unit for such well. Lessee may, likewise, pay the same amount of shut-in royalty on or before the anniversary date of the first payment to maintain the lease in effect as to the proration unit for such shut-in well for an additional year. If Lessee shall fail to properly and timely pay such shut-in royalty as herein provided, then this lease shall terminate as the lands within the proration unit for such well unless the lease is being otherwise maintained in effect as to such acreage. After the expiration of the primary term hereof, payment or payments of shut-in gas royalty as provided for above shall not maintain this lease in force and effect for any one shut-in period greater than 24 months, or, from time to time for shorter periods, all of which shall not exceed four (4) cumulative years.

10. Releases. Subject to the other provisions hereof, Lessee may, at any time, execute and place of record a release or releases of this lease as to all or any part of the leased premises. Such release shall not relieve Lessee of any obligation under this lease or applicable law for damages, cleanup, restoration, well plugging or remediation of surface conditions. Any and all releases of this lease, in whole or in part, shall be made free of all encumbrances created by or under Lessee, and except as otherwise provided herein, all partial releases shall be made so that the lands not released shall, to the extent possible, be a compact body, in one single block and as nearly contiguous as possible. Lessee shall record said release or releases and furnish Lessor with a certified copy of each such release.

11. Operational Standard. All operations commenced or conducted, and all wells drilled hereunder, shall be prosecuted in good faith, with due diligence, and in a workmanlike manner. Lessee shall furnish Lessor with current daily drilling reports and other reports sent to the Railroad Commission of Texas as they are filed with the Railroad Commission of Texas.

12. Force Majeure. The drilling, re-working, completing or other operating obligations or requirements imposed hereunder on Lessee and the right to perpetuate this lease after the primary term by drilling according to Paragraph 5 hereof may be suspended while (and the period while such drilling or other operations are suspended shall not constitute grounds for terminating this lease or counted against Lessee), but for only so long as (in any event not to exceed two periods of no more than two (2) consecutive years each) to the extent that Lessee is directly prevented from complying therewith by acts of God, war, rebellion, insurrection, riots, strikes, fires, storms, floods, explosions, orders, rules, ordinances or regulations of governmental authority or any other acts beyond the control of Lessee, which by exercise of due diligence Lessee is unable to avoid; but as soon as practicable after the cause or matter so preventing such compliance is removed or ceases to exist, Lessee shall immediately resume compliance with such obligations or requirements. In the event that drilling or other operations are suspended as

above provided, Lessee shall immediately notify Lessor thereof in writing, setting forth the full circumstances. The lack of equipment (including, without limitation, drilling rigs, workover rigs or frac units), easements, permits (including without limitation, a drilling permit from any Regulatory Body), or governmental approvals shall not constitute events of force majeure. None of the protections afforded by this paragraph shall apply to any occurrence or cause within the control of Lessee, or which could have been prevented by Lessee, in the exercise of reasonable prudence.

13. Lessee's Records. Lessee shall keep complete and accurate records of all its operations relating to or affecting the leased premises, and the results thereof, including, but not limited to: all land surveys, title opinions and title curative material; all drilling, records; all production records showing the total gross production, the quantities saved, sold and used, the disposition thereof, and the sales prices or values thereof; all production sales contracts; and such other records and data as may be proper for the settlement of accounts between Lessor and Lessee or to determine the respective rights and obligations of said parties hereunder. During the primary term of this lease and for as long as oil and gas is produced therefrom, and for a period of one (1) year thereafter, Lessee shall make all of such records and data available to Lessor for examination in Lessee's office at mutually acceptable times. All information provided by Lessee or obtained by Lessor according to this Paragraph 13 that Lessee identifies or designates as proprietary and confidential shall be deemed proprietary and confidential and during the primary term of this lease and for as long as oil and gas is produced therefrom, and for a period of one (1) year thereafter, all such information shall remain strictly confidential and Lessor shall not disclose such information to any third party (other than financial advisers, accountants and counsel of Lessor) without the prior written consent of Lessee; provided, however, the foregoing obligations of Lessor shall not apply to such portions of such information which (i) are currently possessed by or available to Lessor, (ii) are or become generally available to the public other than as a result of a disclosure by Lessor, (iii) come into the possession of Lessor from a source which is not prohibited from disclosing such information to Lessor by a legal, contractual or fiduciary obligation to Lessee, or any other person, or (iv) is required to be disclosed in order to enforce the terms of this lease or Lessee's obligations hereunder.

14. Adverse Claims and Regulatory Filings. Prior to acquiring a lease from any party claiming adversely to Lessor, Lessee shall notify Lessor thereof and furnish information relative thereto. In the event Lessee should deem it necessary or desirable to apply to a Regulatory Body for rules or orders governing the spacing of wells or the establishment of spacing or proration units including the leased premises, Lessee shall, at least fifteen (15) days prior to the filing of such application, notify Lessor in writing of its proposed plan, setting forth in detail the purposes of such application or plan, the results to be achieved thereby, and full and complete information pertaining thereto; and Lessee shall thereafter keep Lessor fully informed with respect to such plan and any changes or modifications thereof.

15. Taxes. Lessee shall pay, before the same become delinquent, all taxes levied against its rights hereunder or against any of its improvements, facilities, equipment, or other property. Lessor shall pay, before the same becomes delinquent, any ad valorem tax assessed against the surface of the leased premises, in default of which Lessee may do so and be subrogated to the lien thereof, and Lessee may reimburse itself for the taxes so paid by deducting the amount thereof from any payments accruing to Lessor hereunder.

16. Releases. In the event of termination or forfeiture of this lease for any cause, in whole or in part, Lessee shall promptly furnish Lessor a draft of the proposed release instrument. Upon approval of same by Lessor, such approval not to be unreasonably withheld, Lessee shall execute and record the proper instrument of release, releasing from the terms hereof all those portions of the leased premises as to which said lease may have terminated or been forfeited; and Lessee shall promptly furnish Lessor an executed or certified copy thereof.

17. Surface Access. Notwithstanding anything to the contrary in this Lease, this Lease grants no rights of access to, or use of, the surface of the lands described herein except for conducting seismic operations by way of utilizing the vibroseis-method only (no explosives), and wherever in this Lease the terms "land" or "lands" are used, the same shall be deemed to refer solely to the subsurface of the lands. Lessee is, however, granted a subsurface easement to horizontally drill under the surface of the lands covered hereby for wells producing under the lands and lands pooled therewith. Except as to the seismic operations noted above, Lessee is

prohibited from undertaking any acts which in any manner will interfere with surface owner's use and operation of surface owner's facilities located on or above the land covered hereby. Lessee agrees to pay for all damages, if any, which may be inflicted upon the surface of the lands as a direct result from said seismic operations. No well on the lands pooled or unitized herewith may be drilled nearer than 200 feet from any facility or structure belonging to surface owner.

18. Lessor's Remedies. The mention of any right or remedy of Lessor herein shall not preclude Lessor from exercising any other right or remedy to which Lessor might otherwise be entitled; and no failure of Lessor to enforce any provision of this lease shall operate as a waiver of Lessor's right to thereafter enforce such provision or any other provision.

19. Assignments. Except for an assignment to Range Texas Production, L.L.C., Lessee shall not assign, cede, sublease, or otherwise transfer this lease, in whole or in part, nor any interest therein, in whole or in part, nor enter into any other agreement whereby any party other than Lessee acquires any interest in the leased premises, without the written consent of Lessor being first obtained, said consent shall not be unreasonably withheld. The interest of Lessor may be assigned in whole or in part, but such assignment shall not be binding upon Lessee until thirty (30) days after Lessee shall have been furnished with a certified copy of the recorded instrument or instruments showing such change of ownership. Subject to the foregoing, this agreement shall be binding upon, and shall inure to the benefit of the parties hereto and their respective successors and assigns.

20. Notices. Information to be furnished to Lessor:

- (a) Copies of all applications for drilling permits and initially designated units filed with the Texas Railroad Commission and/or executed by Lessee;
- (b) Copies of any assignment or farmout agreement of this Lease, or any interest therein, within 30 days of the date of such document

Any notice, communication, payment, or delivery required or permitted hereunder shall be deemed to have been given, sent, paid, or delivered upon the mailing thereof, postage prepaid, addressed to the respective parties at the addresses shown below, until receipt in writing by one party of notice of change of such address by the other party, to wit:

Lessor:

Luminant Mineral Development Company, LLC.
1601 Bryan Street
Dallas, Texas 75201-3411
Attention: Oil & Gas Mineral Development

Lessee:

Thunderbird Oil & Gas, L.L.C.
515 Fourth Street
Graham, TX 76450
Attention:

21. Prior Agreements. This lease is subject to all boundary agreements affecting the leased premises, as well as all licenses, permits, easements, rights of way, surface leases and other recorded contracts of Lessor affecting the surface only of said lands.

22. No Warranty. This agreement is made and entered into without any warranty of title by, or recourse upon, Lessor whatsoever, not even for the return of the consideration paid herefor or hereunder.

23. Indemnity. Lessee herein shall be solely responsible for full compliance with all rules and regulations of the Railroad Commission of Texas, or any other governmental agency, in all of its operation on the leased premises and especially including the proper plugging of any well that is to be abandoned on the leased premises, and does hereby indemnify and agree to hold Lessor harmless against any such rules and regulations. LESSEE SHALL INDEMNIFY,

DEFEND AND HOLD HARMLESS THE INDEMNIFIED PARTIES (AS HEREINAFTER DEFINED) FROM ANY AND ALL LIABILITY, LIENS, DEMANDS, JUDGMENTS, SUITS AND CLAIMS OF ANY KIND OR CHARACTER ARISING OUT OF, IN CONNECTION WITH, OR RELATING TO ANY OPERATION OR ACTIVITY CONDUCTED BY LESSEE, OR ITS AGENTS, CONTRACTORS, EMPLOYEES, LICENSEES OR INVITEES, ON OR UNDER THE LAND, INCLUDING BUT NOT LIMITED TO CLAIMS FOR INJURY OR DEATH OF ANY PERSONS OR DAMAGE, LOSS OR DESTRUCTION OF ANY PROPERTY, REAL OR PERSONAL, UNDER ANY THEORY OF TORT, CONTRACT, STRICT LIABILITY OR OTHERWISE. LESSEE FURTHER COVENANTS AND AGREES TO DEFEND ANY SUITS BROUGHT AGAINST ANY OF THE INDEMNIFIED PARTIES ON ACCOUNT OF SAID CLAIMS AND TO PAY ANY FINAL UNAPPEALABLE JUDGMENTS AGAINST ANY OR ALL OF THE INDEMNIFIED PARTIES RESULTING FROM ANY SUCH SUIT OR SUITS, TOGETHER WITH ALL COSTS AND EXPENSES RELATIVE TO ANY SUCH CLAIMS, INCLUDING BUT NOT LIMITED TO ATTORNEY'S FEES. EACH OF THE INDEMNIFIED PARTIES SHALL HAVE THE RIGHT TO PARTICIPATE IN THE DEFENSE OF ANY SUIT OR CLAIM IN WHICH THEY (OR ANY OF THEM) MAY BE A PARTY WITHOUT RELIEVING LESSEE OF ITS OBLIGATIONS HEREUNDER. THE FOREGOING INDEMNITY SHALL APPLY WHETHER OR NOT ARISING OUT OF THE JOINT OR CONCURRENT NEGLIGENCE, FAULT OR STRICT LIABILITY OF LESSOR OR ANY OF THE INDEMNIFIED PARTIES AND SHALL APPLY, WITHOUT LIMITATION, TO ANY LIABILITY IMPOSED UPON ANY OF THE INDEMNIFIED PARTIES AS A RESULT OF ANY THEORY OF STRICT LIABILITY OR ANY OTHER DOCTRINE OF LAW OR EQUITY, PROVIDED THAT THE FOREGOING INDEMNITY SHALL NOT APPLY TO ANY COSTS, EXPENSES, LOSSES OR LIABILITIES INCURRED OR TO THE EXTENT PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF LESSOR. THE FOREGOING INDEMNITY AND ALL OTHER INDEMNITIES OF LESSEE CONTAINED IN THIS LEASE SHALL SURVIVE ANY TERMINATION OF THIS LEASE AND SHALL INURE TO THE BENEFIT OF LESSOR AND EACH OF THE INDEMNIFIED PARTIES. AS USED IN THIS LEASE, THE TERM "INDEMNIFIED PARTIES" REFERS TO LESSOR AND ANY AND ALL EMPLOYEES, AGENTS, TENANTS, INVITEES AND AFFILIATES OF LESSOR. AS USED IN THIS PARAGRAPH, AN "AFFILIATE" OF LESSOR SHALL MEAN ANY PERSON, FIRM, OR CORPORATION THAT AT THE TIME IN QUESTION IS A SUBSIDIARY OR PARENT CORPORATION OF LESSOR, OR ANY COMPANY WHICH HAS THE SAME PARENT COMPANY AS LESSOR, OR IN WHICH LESSOR OR ANY AFFILIATE OF LESSOR OWNS AS MUCH AS 25% OF ANY CLASS OF THE CAPITAL STOCK OF LESSOR OR ANY AFFILIATE OF LESSOR.

24. HECI v. Neal Notice. To the extent such knowledge and information is available and material to Lessee so that it would act on its own behalf, Lessee agrees to give notice to Lessor of the need, if any, to bring a claim or lawsuit against a third party who is draining, damaging, overproducing, unlawfully depleting, or otherwise damaging any reservoir underlying the leased premises, in a timely fashion so that Lessor may assert Lessor's own claim or lawsuit in a court of appropriate jurisdiction, or before a regulatory agency. Lessee shall give such notice to Lessor within ninety (90) days of the date that Lessee becomes aware of the need to assert such claim or lawsuit. In this regard, Lessee acknowledges that Lessee is in a superior position to Lessor with respect to information regarding the geology, operations, production and sale of oil and gas and constituent hydrocarbons from the leased premises and lands adjacent, contiguous or in the vicinity of the leased premises and particularly with respect to reservoirs not on the leased premises which may be productive of oil, gas or other hydrocarbons and which underlay the leased premises. Nothing herein shall preclude Lessor from bringing Lessor's own action but if Lessor does not receive the notice from Lessee as set forth herein, at Lessor's option, Lessee shall always be deemed to be representing Lessor's royalty share and shall pay same to the Lessor from recoveries or payments to Lessee by virtue or on account of the foregoing.

25. Memorandum of Lease. The parties to this lease agree that neither shall file this lease of record, but that a memorandum of lease shall be recorded in the Deed Records filed of record in the office of the County Clerk of Tarrant County, Texas, evidencing this lease agreement, and the provisions contained in such memorandum shall be limited to the parties hereto, the lands described, the term and notice provisions, and informing the public of the existence of this Oil and Gas Lease between the parties.

26. This lease is binding on all parties, successors, and assigns.

IN TESTIMONY WHEREOF, this lease is executed in multiple originals as of the day and date first above written.

LESSOR:
LUMINANT MINERAL DEVELOPMENT COMPANY LLC

By: 

Name: Brett Wiggs

Title: Authorized Representative

LESSEE:

THUNDERBIRD OIL & GAS, LLC

By: 

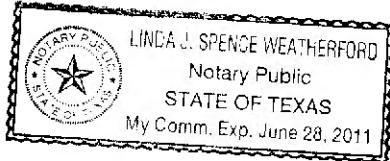
Name: Kerwin Stephens

Title: Member

ACKNOWLEDGEMENT

STATE OF TEXAS
COUNTY OF DALLAS

This instrument was acknowledged before me on February 18, 2009, by Brett Wiggs, Authorized Representative of Luminant Mineral Development Company, LLC, on behalf of said limited liability company.



Notary Public, State of _____
Printed Name: _____
Commission Expires: _____

Printed Name: _____
Commission Expires: _____

Commission Expires: _____

STATE OF TEXAS
COUNTY OF Young

This instrument was acknowledged before me on the 27th day of February, 2009, by
Kerwin Stephens, Member for Thunderbird Oil + Gas, L.L.C.
on behalf of said limited liability company. 11/11

Jennifer Riggins
Notary Public, State of Texas

Seal

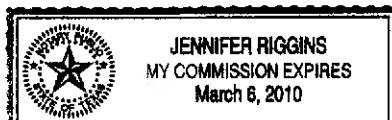


Exhibit "A"

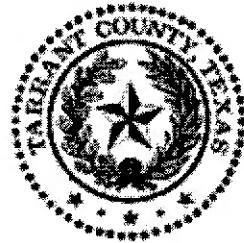
Attached to and made a part of that Certain Oil and Gas Lease dated February 20, 2009, by and between **LUMINANT MINERAL DEVELOPMENT COMPANY, L.L.C.**, as Lessor, and **THUNDERBIRD OIL & GAS, L.L.C.**, as Lessee, covering 5.719 acres, more or less, situated in the Shelby County School Land, Abstract No. 1375, in Tarrant County, Texas.

(1) All of that 0.737 acre tract or parcel of land, more or less, out of the Shelby County School Land Survey, Abstract No. 1375, Tarrant County, Texas, more fully described in that Warranty Deed dated February 29, 1956, from Edith Christopher, a widow, to Texas Electric, filed of record at Volume 2966, Page 30, of the Official Public Records of Tarrant County, Texas; D-1147 and

(2) All of that 1.90 acre tract or parcel of land, more or less, out of the Shelby County School Land Survey, Abstract No. 1375, Tarrant County, Texas, more fully described in that Warranty Deed dated July 5, 1949, from Edith Race Christopher, a widow, to Texas Electric, filed of record at Volume 2101, Page 473, of the Official Public Records of Tarrant County, Texas; D-1059 and

(3) All of that 3.082 acre tract or parcel of land, more or less, out of the Shelby County School Land Survey, Abstract No. 1375, Tarrant County, Texas, more fully described in that Warranty Deed dated April 19, 1970, from Gracie Vaughn, a widow and Lois Vaughn Warren, a widow, to Texas Electric, filed of record at Volume 4892, Page 84, of the Official Public Records of Tarrant County, Texas. D-2052

End of Exhibit "A"



THUNDERBIRD OIL & GAS LLC
515 FOURTH ST

GRAHAM TX 76450

Submitter: THUNDERBIRD OIL & GAS LLC

SUZANNE HENDERSON
TARRANT COUNTY CLERK
TARRANT COUNTY COURTHOUSE
100 WEST WEATHERFORD
FORT WORTH, TX 76196-0401

DO NOT DESTROY
WARNING - THIS IS PART OF THE OFFICIAL RECORD.

Filed For Registration: 03/05/2009 02:48 PM
Instrument #: D209060813
LSE 13 PGS \$60.00

By: _____



D209060813

ANY PROVISION WHICH RESTRICTS THE SALE, RENTAL OR USE
OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR OR
RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL LAW.

Printed by: CN